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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/043,792	01/10/2002	Eric A. Beardsley	13768.783.249	9108
47973 7590 07/24/2007 WORKMAN NYDEGGER/MICROSOFT 1000 EAGLE GATE TOWER 60 EAST SOUTH TEMPLE SALT LAKE CITY, UT 84111			EXAMINER DAO, THUY CHAN	
			ART UNIT 2192	PAPER NUMBER
			MAIL DATE 07/24/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/043,792

Applicant(s)

BEARDSLEY ET AL.

Examiner

Thuy Dao

Art Unit

2192

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-13, 15 and 48-55 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 January 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to the amendment filed on May 7, 2007.
2. Claims 2-13, 15, and 48-55 have been examined.

Response to Amendments

3. Per Applicants' request, claims 2, 5, 6, 8, 9, 11, 15, 48, 51, 52, 54, and 55 have been amended.
4. The objection to claim 48 is withdrawn in view of Applicants' amendments.

Response to Arguments

5. The Applicants are thanked for a thorough reply. Applicants' arguments have been considered but are moot in view of the new ground(s) of rejection.

Drawings

6. The drawings are objected to because FIG. 8, blocks 802 and 806 do not have the corresponding "YES" and "NO".

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

7. The disclosure is objected to because of the following informalities: acronyms should be spelled out at the first appearance in the disclosure (e.g., "SQL", "API" in page 2; "TCP/IP" in page 3).

Appropriate correction is required.

Claim Objections

8. Claims 5, 48, and 53 are objected to because of minor informalities: they contain inconsistent terms such as "test client" and "client", "available" and "assigned", "packet" and "package".

Per independent claims 48 and 51, the phrases are considered to read as - -test client- -, - -available- -, and - -packet- -, respectively.

Appropriate correction is required.

9. Claims 48 and 51 are objected to because of minor informalities. In claim 48 (and similar in claim 51), lines 17-19 clearly recite the limitations "...first determining ... a pending test packet can be run on the available client without reimaging the available test client" (emphasis added).

However, subsequent limitations only recite "if a pending test packet ... can be run on the available test client without reimaging" (line 25) and "...can be run on the available test client with reimaging" (line 27).

Accordingly, the phrases are considered to read as - -...without reimaging the available test client- - and - -...with reimaging the available test client- -, respectively.

Appropriate correction is required.

Claim Rejections – 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 2-13, 15, and 48-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 7,114,159 to Avvari et al. (art made of record, hereinafter "Avvari") in view of US Patent No. 6,163,805 to Silva et al. (art made of record, hereinafter "Silva").

Claim 48:

Avvari discloses a method and a *networked computing environment, a computer test system for testing software on one or more of a plurality of platforms and with one or more of a plurality of languages* (e.g., FIG. 2, col.9: 53 – col.11: 23), *the computer test system comprising:*

a first computer program module configured to:

(a) *receive test conditions defining tests on developed computer program products* (e.g., FIG. 3, col.11: 61 – col.12: 62; FIG. 4, col.13: 1-52);

(b) *receive group information, the group information defining a selected platform and language for each of one or more groups* (e.g., FIG. 6, col.14: 32 – col.15: 49; FIG. 10, blocks 302-306, col.17: 50 – col.18: 32);

(c) *store the test conditions and group information as a test packet in a database, the test packet defining one or more tasks to be performed for a particular group* (e.g., FIG. 1, col.6: 21-67; FIG. 2, col.9: 53 – col.11: 60);

a second computer program module configured to:

(d) *search for an available test client that is available to perform a test job including tasks for a particular group defined in the test packet, wherein searching an available test clients comprises searching according to loading capacity* (e.g., FIG. 10, blocks 306-308, col.17: 50 – col.18: 32; FIG. 11, blocks 402-414, col.18: 34-66);

(e) *select a test packet from the database* (e.g., FIG. 10, blocks 306-310), *wherein selecting a test packet from the database further comprises:*

first determining if any pending test packets can be selected for the available test client such that a pending test packet can be run on the available test client without reimaging the available test client (e.g., FIG. 11, blocks 408-420, col.19: 1-29), and

if a pending test packet can be selected for the available test client such that the test packet can be run on the available test client without reimaging the available test client (e.g., FIG. 12, col.19: 33 – col.20: 32),

selecting the test packet for the available test client and automatically assigning a test job with tasks from the selected test packet to the available test client (e.g., FIG. 13, col.21: 1 – col.22: 47).

Avvari discloses a look up service to match the set of attributes associated with the test suite (e.g., FIG. 11, block 412-414) but does not explicitly disclose *if a pending test packet cannot be selected for the available test client such that the pending test packet can be run on the available test client without reimaging, then determining if a pending test packet can be selected for the available test client such that the pending test packet can be run on the available test client with reimaging, and if the pending test packet can be run on the available test client with reimaging then selecting the test packet for the available test client and automatically assigning a test job with tasks from the selected test packet to the available test client.*

However, in an analogous art, Silva further discloses:

if a pending test packet cannot be selected for the available test client such that the pending test packet can be run on the available test client without reimaging (e.g., FIG. 3, block 42, "Does OS need to be changed? YES"), then

determining if a pending test packet can be selected for the available test client such that the pending test packet can be run on the available test client with reimaging, and if the pending test packet can be run on the available test client with reimaging then selecting the test packet for the available test client and automatically assigning a test job with tasks from the selected test packet to the available test client (e.g., FIG. 3, blocks 43-44-45, "Installer installs OS on test machine", i.e., reimaging the

available test client; and blocks 46-47, launching and executing Job Packet, col.10: 56 – col.11: 16).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine Silva's teaching into Avvari's teaching. One would have been motivated to do so to be able to reconfigure the environment variables as the boot ROM and/or install a new operating system in case the highest priority job does not have any test client having the required environment variables and/or operating system as suggested by Silva (e.g., col.3: 49 – col.4: 10; col.10: 50-55).

Claim 2:

The rejection of claim 48 is incorporated. Avvari also discloses *the second computer program module comprises a management component that is configured to separate one of the test jobs into subtasks, and to order the subtasks into a reordered job, wherein reordering is performed based on subtask dependencies on the loading or installing of a particular application, reordering being performed to make processing of subtasks more efficient* (e.g., FIG. 12, blocks 506-512, col.19: 33 – col.20: 32).

Claim 3:

The rejection of claim 2 is incorporated. Avvari also discloses *the management component is configured to separate a plurality of the test jobs into subtasks, and to order the subtasks of the plurality of test jobs into a reordered job* (e.g., col.18: 1-33).

Claim 4:

The rejection of claim 3 is incorporated. Avvari also discloses *the management component is configured to add a subtask corresponding to a computing environment* (e.g., Table 5, col.27).

Claim 5:

The rejection of claim 48 is incorporated. Avvari also discloses *a test component configured to create a personalized test packet for the available test client based upon*

the platform and applications available at the available test client (e.g., FIG. 10, blocks 302-306, col.17: 50 – col.18: 32).

Claim 6:

The rejection of claim 48 is incorporated. Avvari also discloses *a component configured to: calculate an execution time for the test job; and if the calculated execution time exceeds a predetermined allowable execution time: prevent the test job from being executed; and automatically assign a different test job to the available test client (e.g., FIG. 7, col.16: 1-49).*

Claim 7:

The rejection of claim 48 is incorporated. Avvari also discloses *a database component configured to store the test jobs (e.g., FIG. 1, col.6: 21-67).*

Claim 8:

The rejection of claim 7 is incorporated. Avvari also discloses *the database is configured to store a particular test job in a pending status prior to the particular test job being assigned to an available test client (e.g., FIG. 2, col.9: 53 – col.11: 60).*

Claim 9:

The rejection of claim 7 is incorporated. Avvari also discloses *the database is configured to store a particular test job in an assigned status while the particular test job is assigned to an available test client (e.g., col.6: 21-67).*

Claim 10:

The rejection of claim 7 is incorporated. Avvari also discloses *the database is configured to store a particular test job in a completed status after the particular test job has been run by one of the test clients (e.g., col.9: 53 – col.11: 60).*

Claim 11:

The rejection of claim 48 is incorporated. Avvari also discloses *a message queue for the available test client that is associated with the second computer program module, the message queue for storing information about test jobs that have been assigned to a test client* (e.g., FIG. 9, col.17: 32-49).

Claim 12:

The rejection of claim 48 is incorporated. Avvari also discloses *a high-level interface that permits direct access between the second computer program module and at least one test client* (e.g., FIG. 7-9, col.16: 1 – col.17: 49).

Claim 13:

The rejection of claim 12 is incorporated. Avvari also discloses *a thin client that is configured for communicating between the high-level interface and the at least one test client, the thin client being configured to translate information from a test client to information that may be utilized by the high-level interface* (e.g., FIG. 3, col.11: 61 – col.12: 62).

Claim 15:

The rejection of claim 48 is incorporated. Avvari also discloses *the second computer program module assigns the available test client based upon the present imaging of the available test client* (e.g., FIG. 9, col.17: 32-49).

Claim 49:

The rejection of claim 48 is incorporated. Avvari also discloses *the computer test system further comprises a plurality of test machines* (e.g., FIG. 1-2, col.9: 1- col.11: 23).

Claim 50:

The rejection of claim 49 is incorporated. Avvari also discloses *at least one of the test machines is located remote from the first and second computer program modules* (e.g., FIG. 3, col.11: 61 – col.12: 62).

Claims 51-55:

Claims 51-55 recite the same limitations as those of claims 48, 2, 5-6, and 15, wherein all claimed limitations have been addressed and/or set forth above. Therefore, as the references teach all of the limitations of the above claims, they also teach all of the limitations of claims 51-55.

Conclusion

12. Applicants' amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13. Any inquiry concerning this communication should be directed to examiner Thuy Dao (Twee), whose telephone is (571) 272 8570. The examiner can normally be reached on Tuesday, Thursday, and Friday from 6:00AM to 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam, can be reached at (571) 272 3695.


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The fax phone number for the organization where this application or proceeding is assigned is (571) 273 8300.

Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the TC 2100 Group receptionist whose telephone number is (571) 272 2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

T. Dao



TUAN DAM
SUPERVISORY PATENT EXAMINER